

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

**LISTING OF CLAIMS:**

Amendments shown by strikethrough (for deleted matter) or underlining (for added matter).

1. (Currently amended): A nitride glass with the general formula  $\alpha_x\beta_y\gamma_z$ , wherein  $\alpha$  is at least one electropositive element chosen from the group consisting of Na, K, Rb, Be, Mg, Ca, Sr, Ba, Zr, Hf, Nb, Ta, W, Mo, Cr, Fe, Co, Ni, Zn, Sc, Y, La, Pb, Bi, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Mn, Ho, Er, Tm, Yb, Lu, Th, Pa and U;  $\beta$  comprises Si and optionally at least one element chosen from the group consisting of B, Ge, Ga and Al; and  $\gamma$  is ~~N or~~ N together with O, wherein in an atomic ratio of O:N, where O + N equals 100, O is in the range of 20-65 and N is in the range of 35-80; whereby the nitrogen content given in an atomic ratio of O:N is higher than 65:35, wherein x, y and z are all independently > 0.
2. (Previously presented): A nitride glass according to claim 1, wherein  $\alpha$  is chosen from the group consisting of Lu, Mg, Y, Sc, Nd, Gd, Eu, Er, Tb, Tm, Dy, Yb, Th, Pa, Ca, Sr, Ba, La, Pr, Ce, Sm, Mn and Ho.
3. (Previously presented): A nitride glass according to claim 2, wherein  $\alpha$  is chosen from the group consisting of Ca, Sr, Ba, La, Pr, Ce, Sm, Mn and Ho.
4. (Previously presented): A nitride glass according to claim 1, wherein the ratio  $\alpha:\beta$  is in the interval from 30:70 to 60:40.
5. (Previously presented): A nitride glass according to claim 1, wherein the ratio  $\beta:\gamma$  is in the interval from 33:67 to 22:78.
6. (Previously presented): A nitride glass according to claim 1, wherein  $\beta$  consists of Si.

7. (Currently amended): A nitride glass according to claim 1, wherein the nitride glass has a hardness value above 5 ~~Gpa~~-GPa.

8. (Previously presented): A nitride glass according to claim 1, wherein the nitride glass has a refractivity index above 1.4.

9. (Previously presented): A nitride glass according to claim 1, wherein the nitride glass possesses magnetic and/or magnetooptic properties; and  $\alpha$  comprises at least one element chosen from the group consisting of Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Pa, U and Mn.

10. (Currently amended): A method for preparing a nitride glass according to claim 1, comprising:

a) mixing chemicals corresponding to the desired composition to form a mixture, wherein the composition comprises  $\text{SiO}_2$ ;

b) heating said mixture to a temperature of at least 1000 °C in the presence of nitrogen gas, thereby obtaining a melt;

c) maintaining the temperature of step b) until the melt is homogenous; and

d) cooling the homogeneous melt to a temperature below the transition temperature of the glass while using a cooling rate, that is sufficient to obtain a glass phase, wherein

$\alpha$  is a pure metal and/or a metal nitride, a metal hydride, or a compound that transforms to a metal nitride in step a) or b).

11. (Previously presented): A method according to claim 10, wherein the temperature in steps b) and c) is above 1500 °C.

12. (Currently amended): A nitride glass with the general formula  $\alpha_x\beta_y\gamma_z$ , wherein

$\alpha$  is at least one electropositive element chosen from the group consisting of Na, K, Rb, Be, Mg, Ca, Sr, Ba, Zr, Hf, Nb, Ta, W, Mo, Cr, Fe, Co, Ni, Zn, Sc, Y, La, Pb, Bi, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Mn, Ho, Er, Tm, Yb, Lu, Th, Pa and U;

$\beta$  is at least one element chosen from the group consisting of Si, B, Ge, Ga and Al; and

$\gamma$  is N or N together with O, wherein, in an atomic ratio of O:N, where O + N equals 100, O is in the range of 20-65, and N is in the range of 35-80; whereby the nitrogen content given in an atomic ratio of O:N is higher than 65:35, wherein x, y and z are all independently > 0;

wherein the nitride glass is prepared by a method comprising the steps of:

- a) mixing chemicals corresponding to the desired composition to form a mixture, whereby the composition comprises SiO<sub>2</sub>;
- b) heating said mixture to a temperature of at least 1000 °C in the presence of nitrogen gas, thereby obtaining a melt;
- c) maintaining the temperature of step b) until the melt is homogenous; and
- d) cooling the homogenous melt to a temperature below the transition temperature of the glass using a cooling rate, that is sufficient to obtain a glass phase, wherein  $\alpha$  is a pure metal and/or a metal nitride, a metal hydride, or a compound that transforms to a metal nitride in step a) or b).

13. (Previously presented): A nitride glass according to claim 1, wherein the ratio  $\alpha:\beta$  is in the interval from 41:59 to 60:40.

14. (Currently amended): A nitride glass according to claim 7, wherein said hardness value is above 9.9 ~~Gpa~~ GPa.

15. (Currently amended): A nitride glass according to claim 7, wherein said hardness value is above 12.3 ~~Gpa~~ GPa.

16. (Previously presented): A nitride glass according to claim 8, wherein said refractivity index is above 1.9.

17. (Previously presented): A nitride glass according to claim 8, wherein said refractivity index is above 2.2.

18. (Previously presented): A method according to claim 11, wherein the temperature in step b) is above 1800 °C.

19. (Previously presented): A nitride glass according to claim 12, wherein the temperature in step b) is above 1500°C.

20. (Previously presented): A nitride glass according to claim 12, wherein the temperature in step b) is above 1800°C.